

**REMARKS**

At the outset, Applicant thanks the Examiner for the thorough review and consideration of the subject application. The Final Office Action of February 5, 2004 has been received and its contents carefully reviewed.

In the Office Action dated February 5, 2004, the Examiner objected to the drawings under 37 CFR 1.83(a); rejected claims 2 and 6 under 35 U.S.C. § 112, first paragraph, because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make LED lamps or chips that cover a luminescent area over 100°; rejected claims 1, 5 and 11-14 under 35 U.S.C. § 102(e) as being anticipated by Mochizuki (U.S. Patent No. 6,386,720); rejected claims 3, 4, 7, and 8 under 35 U.S.C. § 103(a) as being unpatentable over Mochizuki; rejected claims 2 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Mochizuki in view of Meggs et al. (U.S. Patent No. 4,521,835); rejected claims 1, 5, and 11-14 under 35 U.S.C. § 103(a) as being unpatentable over Tokunaga et al. (U.S. Patent No. 5,375,043) in view of the related art shown in Figures 1 and 2; rejected claims 9 and 10 rejected under 35 U.S.C. § 103(a) as being unpatentable over Stinson (U.S. Patent No. 4,499,704); and rejected claims 15-18 under 35 U.S.C. § 103(a) as being unpatentable over Stinson in view of either Mochizuki or Tokunaga. These objections and rejections are traversed and reconsideration of the claims is respectfully requested in view of the amendments above and in view of the following remarks.

The objection to the drawings under 37 CFR § 1.83(a) is respectfully traversed and reconsideration is requested.

In objecting to the drawings the Examiner stated that “a plurality of lamps, each of the lamps / chips has a luminescent area over 100 degrees must be shown or the feature(s) canceled from the claim(s).”

According to M.P.E.P. § 2125, the drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art. Moreover, when the specification does not disclose that the drawings are to scale, arguments based on measurement of the drawing figures are of little value.

Applicant respectfully directs the Examiner to Figures 4A and 4B where the luminescent area of the lamps / chips is shown. In view of both the specification and the drawings, Applicant respectfully submits one of ordinary skill in the art would recognize that the claim element “each of the lamps / chips has a luminescent area over 100 degrees” has been adequately shown in the Figures.

In the “Response to Arguments” section of the present Office Action, the Examiner disagrees with the Applicant’s arguments presented above because “the drawing figures are inadequate and show rather each of the lamps / chips outputting a luminescent area near 60 degrees.”

According to M.P.E.P. § 707.07(f), where the Applicant traverses any rejection (or other action by the Examiner), the Examiner should, if the Examiner repeats the action, take note of the Applicant’s argument and answer the substance of it. By simply concluding that the drawing figures are “inadequate” and show a luminescent area near 60°, it is respectfully submitted that the Examiner has failed to rebut the substance of Applicant’s arguments (i.e., that the drawings communicate to one of ordinary skill in the art that each of the lamps / chips has a luminescent area over 100°). Specifically, the Examiner has failed to establish that one of ordinary skill in the art would not understand that the drawings (which are not disclosed in the specification as being to scale) illustrate lamps / chips having a luminescent area over 100° merely by asserting that the drawings are “inadequate” and that the drawings

show a luminescent area of about 60°. Accordingly, Applicant requests that the present objection to the drawings be withdrawn.

The rejection of claims 2 and 6 under 35 U.S.C. § 112, first paragraph, because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make LED lamps or chips that cover a luminescent area over 100° is respectfully traversed and reconsideration is requested.

In rejecting claims 2 and 6, the Examiner stated that the specification was enabling “for the LED lamp or chip according to the present invention covers a luminescent area over 100 degrees (page 8, line 0045), does not reasonably provide enablement for “each of the lamps/chips has a luminescent area over 100 degrees.” The Examiner further states “[t]he specification is not enabling because there is no support behind the LED lamp or chip being able to cover 100 degrees of luminescent area” and concludes “[o]ne of ordinary skill in the art would have recognized that there are many variables to control or produce a desired output (solid angle) of the LED, including, shape of the reflector support, refracting cover ... etc.” The Examiner then summarizes by stating “[t]he specification does not provide a how the LED is capable of covering over 100 degrees of luminescent area and one in ordinary skill in the art would not reasonably apprised of the scope of the invention.”

According to M.P.E.P. § 2164.04, in order to make a rejection under 112 U.S.C. § 112, first paragraph, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. A specification disclosure which contains a teaching of the manner and process of making and using an invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken as being in compliance with the enablement requirement of 35 U.S.C. 112, first paragraph, unless there is a reason to doubt the objective truth of the

statements contained therein which must be relied on for enabling support. A reasonable basis to question enablement is established only when the Examiner provides a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled by the disclosure.

A proper finding of lack of enablement can be done by making specific findings of fact, supported by evidence, and then drawing conclusions based on these findings of fact. For example, if doubt arises about enablement because information is missing about an essential part which one skilled in the art could not develop without undue experimentation, the Examiner should specifically identify what information is missing and why one skilled in the art could not supply the information without undue experimentation. See M.P.E.P. § 2164.06(a).

In the present rejection, the Examiner specifically noted that the specification failed to provide how an LED is capable of covering over 100 degrees of luminescent area. In the "Response to Arguments" section of the present Office Action, the Examiner asserted that the "originally filed specification does not provide an adequate description of 'each of the lamps has a luminescent area over 100 degrees'."

By those statements alone, however, Applicant respectfully submits that the Examiner failed to provide any explanation as to why one skill in the art could not determine how an LED is capable of covering over 100 degrees of luminescent area without undue experimentation, as set forth in M.P.E.P. § 2164.06(a). Alleging a supportive deficiency in the specification satisfies only the first of two requirements necessary to establish a *prima facie* case of lack of enablement. The second of the two requirements necessary to establish a *prima facie* case of lack of enablement (i.e., a reason as to why one skilled in the art could not supply the missing information without undue experimentation), however, has not been, and

cannot be, established merely by stating “there are many variables to control or produce a desired output (solid angle) of the LED....” According to M.P.E.P. § 2164.06, the test for undue experimentation is not merely quantitative, since a considerable amount of experimentation is permissible if the specification provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed.

Moreover, it is respectfully submitted that the Examiner’s statement that “[o]ne of ordinary skill in the art would have recognized that there are many variables to control or produce a desired output (solid angle) of the LED, including shape of the reflector support, refracting cover, etc.,” effectively constitutes an admission that one of ordinary skill in the art would be reasonably appraised of how to provide LEDs having a luminescent area of over 100° without undue experimentation.

In the “Response to Arguments” section of the present Office Action, the Examiner stated that “the burden is on applicant, not the examiner, to explain and disclose all of the specific details of the invention in a clear manner in the patent application.” It is respectfully submitted, however, that a specification disclosure containing a teaching of the manner and process of making and using an invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken as being in compliance with the enablement requirement of 35 U.S.C. 112, first paragraph, unless there is a reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support. A reasonable basis to question enablement is established only when the Examiner provides a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled by the disclosure (see M.P.E.P. § 2164.04). In view of the arguments presented above, it is respectfully submitted that the Examiner has failed to meet his initial burden of establishing a reasonable basis to question the enablement provided